

REMARKS

Status of Claims:

Claims 1-54 were pending in the application; claims 32-53, subject to a restriction requirement, are hereby cancelled without prejudice to, or disclaimer of, any subject matter contained within. Claim 54 is a product-by-process claim, dependent from canceled claim 32. Because all of the process claims have been canceled pursuant to a restriction requirement, claim 54 is hereby withdrawn without disclaimer or prejudice. Claims 1-31 are now pending. Each of the pending claims defines an invention that is novel and unobvious over the cited art. Favorable consideration of this case is respectfully requested.

Disclosure Supporting the Instant Amendment:

Claim 1 is hereby amended to recite: "first and second major surfaces" and "plated metal." Support for the recitation "major surfaces" was present in the original disclosure in Figures 1e and 2e. Support for the recitation "plated metal" was present in the original disclosure at, for example, page 8, lines 8-11.

Allowable Subject Matter:

Claim 31 is deemed to be free of the prior art, but was objected to as depending from a rejected base claim. Claim 31 would be allowable if re-written in independent form including all of the recitations of the base claim (claim 29) and any intervening claims (30).

Rejections Under 35 U.S.C. § 112, 2nd Paragraph:

Claim 54 was rejected under 35 U.S.C. § 112, 2nd Paragraph, as being indefinite for depending from a canceled claim.

Claim 54 is hereby canceled without prejudice or disclaimer.

Rejection Under 35 U.S.C. § 102(e):

Claims 1, 3, 5-6, 12-14, and 54 were rejected under 35 U.S.C. § 102(e) as being anticipated by Asai (6,240,636).

Rejection under 35 U.S.C. § 102 requires the prior art disclose each and every limitation of the claimed invention (MPEP § 706.02). In determining anticipation, no claim limitation may be ignored. See *Pac-Tex, Inc. v. Amerace Corp.*, 14 USPQ2d 1871 (Fed. Cir. 1990). Anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986). There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. § 102. See *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984).

Claims 1 and 17 are hereby amended to more distinctly point out and claim that a major surface of the inventive structure is formed by the metal circuitry/dielectric co-plane. This feature was fully disclosed most particularly in original figures 1(e, h) and 2(e, h). In view of the original disclosure the amendment does not comprise new matter. The evidentiary record fails to teach each limitation of the present invention in view of the silence of Asai regarding a major surface formed of a circuitry/dielectric co-plane.

Claims 17 and 19-21 were rejected under 35 U.S.C. § 102(e) as being anticipated by Kataoka (6,270,889). As discussed above, Claim 17 is amended to point out that the metal circuitry/dielectric co-plane form a major surface of the inventive structure. Kataoka and Asai each disclose structures in which a circuitry/dielectric plane is buried and does not form a major surface.

Rejection Under 35 U.S.C. § 103(a):

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Tachibana (6,270,607).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*. All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*. (MPEP § 2143.03). When evaluating the scope of a claim, every limitation in the claim must be considered. See e.g. *In re Ochiai*. (MPEP § 2144.08). The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Takayama (5,977,783).

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claims 4, and 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Hayashi (6,359,235).

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure. The present invention discloses, and claims 1 and 17 recite, a circuitry/dielectric co-plane forming a major surface of an electronic structure. In contrast, Hayashi discloses "a transfer film 5 having a wiring layer 4 formed on the surface thereof is contact-bonded on the insulation sheet 1 with pressure, thereby transferring the wiring layer 4 onto the surface of the insulation sheet 1." (Column 5, lines 35-38).

Hayashi does not teach a wiring/dielectric co-plane. Rather, Hayashi teaches a wiring plane bonded on top of a dielectric film.

Claims 15-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Miura (5,768,108).

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claims 7, and 24-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Kataoka.

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kataoka in view of Asai and Hayashi.

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claims 22-23 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kataoka in view of Hayashi.

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claims 27-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai and Kataoka in view of Miura.

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Claim 30 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kataoka and Hayashi and further in view of Asai.

The evidentiary record fails to teach each limitation of the present invention. Specifically, the references taken as a whole or severally fail to teach a circuitry/dielectric co-plane forming a major surface of an electronic structure.

Conclusion:

In view of the above, consideration and allowance are, therefore, respectfully solicited.

Accordingly, it is respectfully requested that the foregoing amendments be entered, that the application as so amended receive an examination on the merits, and that the claims as now presented receive an early allowance.

If the Examiner believes that an interview would facilitate the prosecution of this case, Applicants urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned hereby authorizes the Commissioner to charge any insufficient fees or credit any overpayment associated with this communication to deposit account no. 22-0185.

Respectfully submitted,

Date:

9/15/03



John A. Evans, Reg. No. 44,100
Connolly Bove Lodge & Hutz LLP
Attorneys for Applicants
1990 M Street, N.W.
Washington, DC 20036-3425
Telephone: 202-331-7111
Facsimile: 202-293-6229

OFFICIAL

RECEIVED
CENTRAL FAX CENTER
SEP 16 2003